

## THE UNIVERSITY OF ARIZONA

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CR-132117

COLLEGE OF AGRICULTURE
DEPARTMENT OF WATERSHED MANAGEMENT

May 31, 1973

Mr. Burton B. Schardt ERTS Program Manager Code ER, NASA Headquarters Washington, D.C. 20546

Subject: Progress Report (Type I)

(April 1, 1973 - May 31, 1973)

Contract MASS - 21820

- a. Use of Earth Resources Technological Satellite (ERTS)
  Data in a Natural Resource Inventory. (SR099).
- b. GSFC UN 620.
- c. None.
- d. During this reporting period several attempts were made using a video-densitometer and a color additative viewer to determine if landscape units defined on aircraft data could be identified on ERTS data. These trials were generally unsuccessful except where landscape units were strikingly dissimilar. Specifically the only landscape unit which could regularly be detected on ERTS imagery was a ciencgal which differed considerably from the surrounding grasslands.

Work is currently being done with a device designed to give an index of drainage densities for each landscape unit. Initial results indicate that this index may be an excellent discriminator or descriptor for the units as they are presently recognized and mapped.

During the next reporting period taxonomic units will be identified within each geomorphic-soil-vegetation unit and selected sites will be sampled on the ground. This work will continue for approximately four months.

e. Not applicable at this time.

(E73-10666) USE OF EARTH RESOURCES

TECHNOLOGICAL SATELLITE (ERTS) DATA IN A

NATURAL RESOURCE INVENTORY Progress
Report, 1 Apr. - 31 May 1973 (Arizona
Univ., Tucson.) 2 p HC \$3.00 CSCL 05B G3/13 00666

- f. Not applicable at this time.
- g. Not applicable at this time.
- h. None.
- i. None.
- j. None.
- k. None.

Ernest B. Fish Principal Investigator

CDF: jkg